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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,901	09/24/2003	Philippe Jung	15437-0639	6019

45657 7590 03/01/2007  
HICKMAN PALERMO TRUONG & BECKER, LLP  
AND SUN MICROSYSTEMS, INC.  
2055 GATEWAY PLACE  
SUITE 550  
SAN JOSE, CA 95110-1089

EXAMINER

MOUZON, LAJUANIA N

ART UNIT PAPER NUMBER

2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/670,901

Applicant(s)

JUNG, PHILIPPE

Examiner

La Juania N. Mouzon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 600. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either

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"Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The disclosure is objected to because of the following informalities: the lack of a end period (".") (Pg. 5 line 6).

Appropriate correction is required.

5. The disclosure is objected to because of the following informalities: it should be "of" instead of "pf" (Pg. 21 line 23).

Appropriate correction is required.

6. The disclosure is objected to because of the following informalities: there is not a label "600" on Figure 6 (Pg. 17 line(s) 11 & 14; Pg. 22 line(s) 12 & 15).

Appropriate correction is required.

7. The abstract of the disclosure is objected to because the word "based" should be removed (**line 9**). Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Software, per se:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

10. Claims 23 – 34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As defined in the specification a computer-readable medium can be a transmission medium such as analog or digital signal.

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***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1, 10, 13, 23, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Bellaton et al. (US 6,473,425) filed on 10/2/97 patented on 10/29/02.

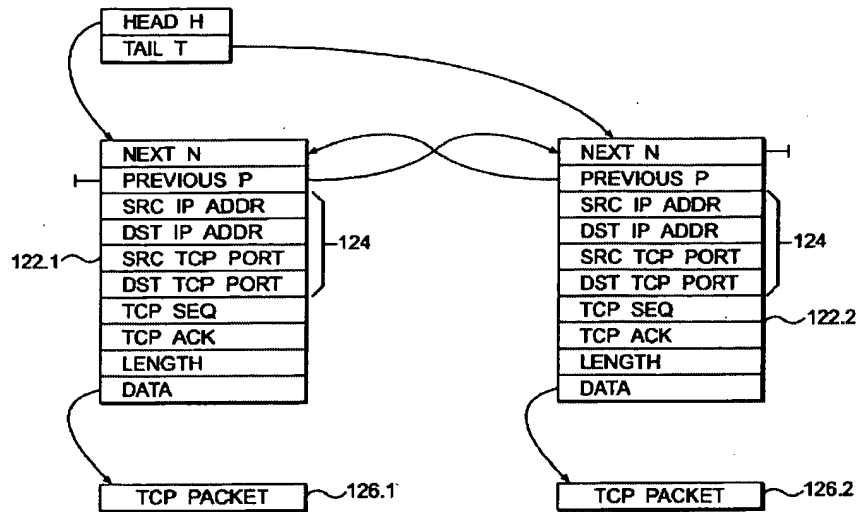
Figures 10 and 11 of Bellaton et al. are reproduced below.

13. In regards to claim 1 Bellaton et al. discloses, A method for processing redundant packets, said method comprising:

- a. receiving an incoming packet comprising a source address and data (**Col. 9 line(s) 27-28, teaches that there is an incoming packet with a source**

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address and data, as shown in fig. 10 below.);



**FIG. 10**

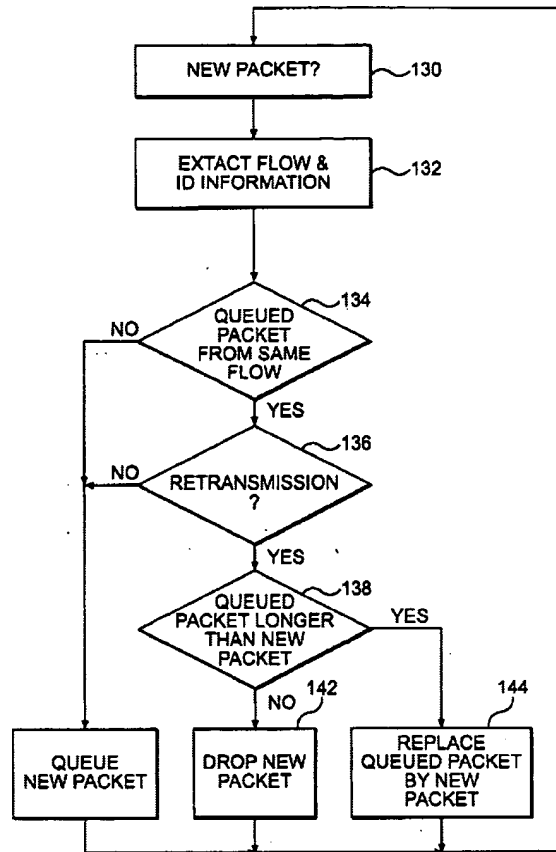
- b. searching for said source address of said incoming packet in at least a portion of memory data (Col. 9 line(s) 32-35, teaches that the source address is searched for in memory.);
- c. provided said source address is found in said portion of memory data (Col. 9 line(s) 35-37, teaches that that the source address is found in memory.),
- d. determining a packet identifier based on said data comprised in said incoming packet data (Col. 9 line(s) 8, teaches that an identifier (TCP SEQ) is determined from the incoming packet data.),

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- e. searching for said packet identifier in at least a portion of a database data **(Col. 9 line(s) 42-47, teaches searching for the identifier in the database.);**
- f. and provided said packet identifier is not found in said portion of said database data **(Col. 10 line(s) 7, teaches if the identifier is not found in the database),**
- g. storing said packet identifier in said portion of said database data **(Col. 10 line(s) 10-11, teaches that storing the identifier in the database.).**

14. In regards to claims 10 and 32 Bellaton et al. discloses further comprising determining a first value based on said packet identifier **(Fig. 11 #132, as shown below, displays that a first value (ID information value/ index value) is determined from the packet identifier.).**



**FIG. 11**

15. In regards to claim 13 Bellaton et al. discloses a system for filtering redundant packets, said system comprising:

- h. a memory manager comprising a reserved memory area, said reserved memory area comprising (Col. 8 line( s) 56-58, teaches a memory manager, with reserved memory area.)
- i. at least one portion of memory comprising at least a source address (Col. 8 Line(s) 53-67 – Col. 9 line(s) 1-12, teaches that the a portion of the memory has a source address. This is also shown in Fig. 10 on page 5.)

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- j. and a database, wherein at least one portion of said database comprises at least one index value associated with a packet identifier (**Col. 8 Line(s) 53-67 – Col. 9 line(s) 1-12, teaches a database whereas the database has an index value associated with the packet. Identifier. This is also shown in Fig. 10 on page 5.)**)
- k. and an incoming packet manager operable to receive an incoming packet comprising a source address (**Col. 8 line( s) 27-31, teaches an incoming packet manager**)
- l. search said portion of memory for said source address of said incoming packet (**Col. 9 line(s) 32-35, teaches that the source address is searched for in memory.)**,
- m. determine a packet identifier of said incoming packet (**Col. 9 line(s) 8, teaches that an identifier (TCP SEQ) is determined from the incoming packet data.)**, if said source address of said incoming packet is found) (**Col. 9 line(s) 35-37, teaches that that the source address is found in memory.)**,
- n. determine an index value based on said packet identifier of said incoming packet (**Fig. 11 #132, as shown on page 8, displays that a first value (ID information value/ index value) is determined from the packet identifier.)**.,
- o. search said database for said index value of said incoming packet (**col. 9 line(s) 35-38, teaches the searching of the database for the index value.)**,
- p. and store said packet identifier of said incoming packet in said database if said index value of said incoming packet is not found (**Col. 10 line(s) 10-11,**

**teaches that storing the identifier in the database if the index value is not found. This is also shown in fig. 11 on page 8, following the No path from #134.).**

16. In regards to claim 23 Bellaton et al. discloses a computer-readable medium having computer-readable program code embodied therein for causing a computer system to perform a method for processing redundant packets, said method comprising **(Col. 7 line(s) 9-11, computer-readable medium having computer-readable program code embodied therein for causing a computer system to perform a method for processing redundant packet.):**

q. **receiving an incoming packet comprising a source address and data (Col. 9 line(s) 27-28, teaches that there is an incoming packet with a source address and data, as shown in fig. 10 on page 5.);**

r. **searching for said source address of said incoming packet in at least a portion of memory (Col. 9 line(s) 32-35, teaches that the source address is searched for in memory.);**

s. **provided said source address is found in said portion of memory (Col. 9 line(s) 35-37, teaches that that the source address is found in memory.),**

t. **determining a packet identifier based on said data comprised in said incoming packet (Col. 9 line(s) 8, teaches that an identifier (TCP SEQ) is determined from the incoming packet data.),**

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- u. searching for said packet identifier in at least a portion of a database (**Col. 9 line(s) 42-47, teaches searching for the identifier in the database.**);
- v. and provided said packet identifier is not found in said portion of said database (**Col. 10 line(s) 7, teaches if the identifier is not found in the database**),
- w. storing said packet identifier in said portion of said database (**Col. 10 line(s) 10-11, teaches that storing the identifier in the database.**).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

19. Claims 2-4, 14-16, and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellaton et al. (US 6,473,425) filed on 10/2/1997 and patented on

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10/29/2002 as applied to claims 1, 13, and 23 above, and further in view of Koch et al (US 6,359,888) filed on 7/5/00 and patented 3/19/02.

Figure 4 & 3 of Koch is reproduced below.

20. In regards to claims 2, 14, and 24 Bellaton et al. does not disclose, further comprising determining whether a time condition for said incoming packet is satisfied **(Col. 4 line(s) 17-24)**.

21. In the same field of endeavor Koch et al. teaches that there is a time condition placed on the incoming packet.

22. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al. a mechanism for dispatching packets with Koch et al. teaching as discussed above to allow for the capability of determining the if the packet is a duplicate or part of the same transaction, to allow for the relying of the correct data without errors and to speed up the processing of the whole message.

23. In regards to claims 3, 15, and 25 Bellaton et al. does not disclose provided said packet identifier is found in said portion of said database and said time condition is satisfied, identifying said incoming packet as a redundant packet; and removing said packet identifier from said portion of said database.

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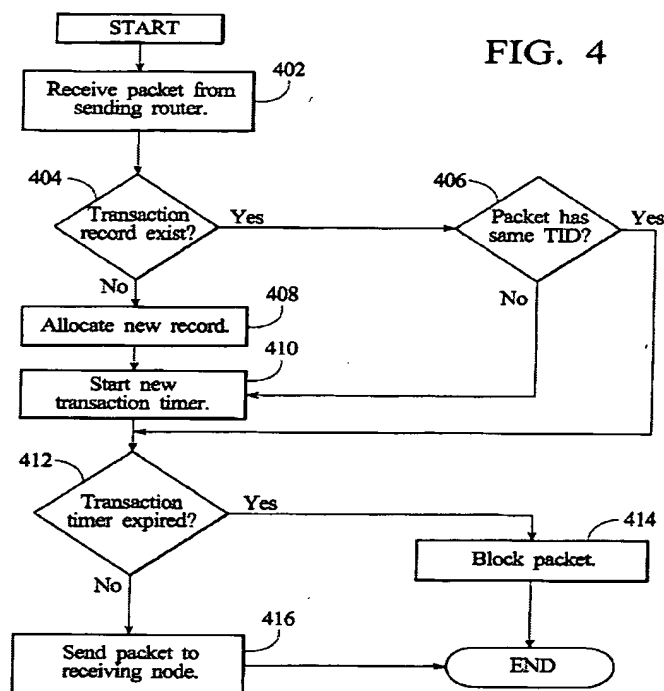
24. In the same field of endeavor Koch et al. teaches provided said packet identifier is found in said portion of said database and said time condition is satisfied, identifying said incoming packet as a redundant packet; and removing said packet identifier from said portion of said database satisfied **(Col. 4 line(s) 17-24)**.

25. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al. a mechanism for dispatching packets with Koch et al. teaching as discussed above to allow for the capability of determining the if the packet is a duplicate or part of the same transaction, to allow for the relying of the correct data without errors and to speed up the processing of the whole message.

26. In regards to claims 4, 16, and 26 Bellaton et al. discloses provided said packet identifier is found in said portion of database and said storing said packet identifier in said portion of said database, as mentioned above in ¶16.

27. Bellaton et al does not disclose whereas said time condition is not satisfied.

28. In the same field of endeavor Koch et al. teaches filtering criteria based on time conditions **(See Fig. 4 #412, shown below)**.



29. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al. a mechanism for dispatching packets with Koch et al. teaching as discussed above to allow for the capability of determining the if the packet is a duplicate or part of the same transaction, to allow for the relying of the correct data without errors and to speed up the processing of the whole message.

30. Claims 5-9, 17-21 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellaton et al., in view of Koch, as applied to claims 2, 14, 24 above, and further in view of Danneels (US 5,602,992) filed on 11/29/93 patented on 2/11/97.

31. In regards to claims 5, 17, and 27 further Bellaton et al. discloses storing said packet identifier in said portion of said database, as mentioned above in ¶16.

32. Neither Koch et al. nor Bellaton et al. teaches storing an arrival time of said incoming packet in said portion of said database

33. In the same field of endeavor Danneels's teaches storing the arrival time of an incoming packet (**Col. 5 line(s) 65-67 – Col. 6 line(s) 1-4**).

34. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al., a mechanism for dispatching packets, and Koch et al., a method for detecting invalid packets, with Danneels's teaching as discussed above to allow for the capability of synchronizing data streams arriving from one server and providing then to a client in the same time sequence as they were captured for playing it back or relying the message in one unified stream.

35. In regards to claims 6, 18, and 28 neither Bellaton et al. nor Koch et al. discloses wherein determining whether said time condition is satisfied comprises: comparing a current time with said arrival time to determine an age of said packet identifier; and comparing said age to a given time period in order to determine if said time condition is satisfied.



36. In the same field of endeavor Danneels's teaches comparing the arrival time with the current time to find out the age of the packet and if the time condition is satisfied **(Col. 8 line(s) 8-31)**.

37. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al., a mechanism for dispatching packets, and Koch et al., a method for detecting invalid packets, with Danneels's teaching as discussed above to allow for the capability of synchronizing data streams arriving from one server and providing them to a client in the same time sequence as they were captured for playing it back or relying the message in one unified stream.

38. In regards to claims 7, 19, and 29 Bellaton et al. discloses removing said packet identifier and said arrival time; and replacing said packet identifier with a new packet identifier of said incoming packet and replacing said arrival time with a new arrival time associated with said incoming packet **(Col. 9 line(s) 61-67 – Col. 10 line(s) 1-3)**

39. Neither Bellaton et al. nor Koch et al. teaches, wherein said comparing said age to said given time period comprises: determining that said time condition is satisfied if said age is greater than said given time period.

40. In the same field of endeavor Danneels's teaches a satisfied time condition if the age is greater than the time period **(Col. 8 line(s) 27-29)**.

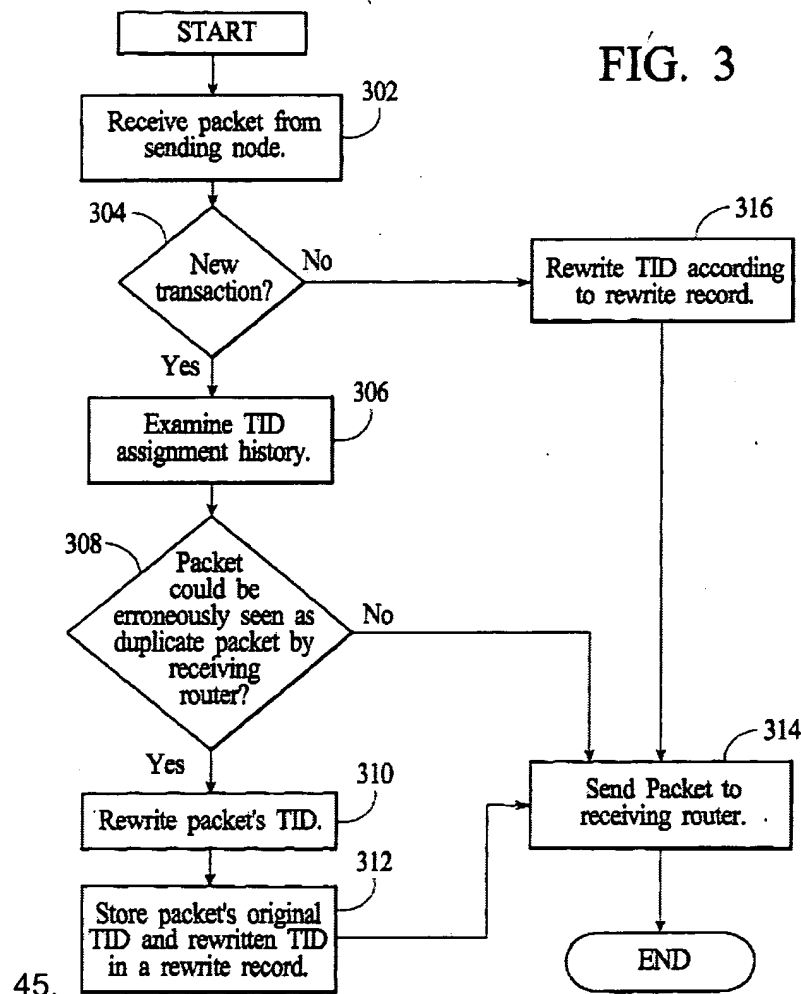
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41. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al., a mechanism for dispatching packets, and Koch et al., a method for detecting invalid packets, with Danneels's teaching as discussed above to allow for the capability of synchronizing data streams arriving from one server and providing then to a client in the same time sequence as they were captured for playing it back or relying the message in one unified stream.

42. In regards to claims 8, 20, and 30 neither Bellaton et al. nor Danneels discloses further comprising customizing said time period for incoming packets comprising the same source address.

43. In regards to claims 9, 21, and 31 neither Bellaton et al. nor Danneels discloses further comprising updating said time period associated with a source according to the rate of incoming packets from said source.

44. In the same field of endeavor Koch et al. teaches updating/ customizing the time period of the packet according to the rate it is received. This is shown below in fig. 3 following the No path from #304 to #316, whereas it rewrite the information therefore updating said time.



46. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al., a mechanism for dispatching packets, and Danneels's, system for synchronizing data stream transfers, with Koch et al. teaching as discussed above to allow for the capability of modifying the time of the packet depending on when it was received based off of the rate they are received because not all networks can guarantee an in-order delivery of data packets.

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47. Claims 11, 22, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellaton et al. (US 6,473,425) filed on 10/2/97 and patented on 10/29/02 as applied to claim 1 above, and further in view of Chandranmenon et al. (Chandranmenon et al., Trading Packet Headers for Packet Processing)

48. In regards to claims 11, 22, and 33 Bellaton et al. does not disclose, wherein said determining said first value comprises using a hash function for determining said first value.

49. In the same field of endeavor Chandranmenon et al. teaches using a hash function for determining a first value (**Introduction ¶2**).

50. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al. a mechanism for dispatching packets with Chandranmenon et al. teaching as discussed above to speed up packet filter processing.

51. Claims 12 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellaton et al. (US 6,473,425) filed on 10/2/97 and patented on 10/29/02 as applied to claim 1 above, and further in view of Shen et al (US 5,956,088) filed on 11/21/95 and patented on 9/21/99.

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52. In regards to claims 12 and 34 Bellaton et al. does not disclose, wherein said storing said packet identifier in said portion of said database further comprises: provided said portion is full of other packet identifiers, comparing current time with stored arrival times corresponding to said other packet identifiers to determine ages of said packet identifiers; determining an oldest packet identifier of said other packet identifiers; and deleting said oldest packet identifier and its corresponding arrival time.

53. In the same field of endeavor Shen et al. teaches if the database is full it compares the times and removes the older of the two packets and replaces it with the newer packet (**Col. 14, line(s) 2-8**).

54. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Bellaton et al. a mechanism for dispatching packets with Shen et al. teaching as discussed above to allow for the capability of preserving the quality of the original encoded signal, since the receiver only receives packets corresponding to unmodified items.

### ***Conclusion***

55. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kalian et al. US PGPub 2002/0012364, teaches a method synchronizing the replay of audio data.

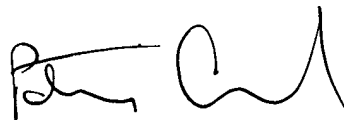
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56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to La Juania N. Mouzon whose telephone number is 571-270-3045. The examiner can normally be reached on Monday - Friday 8:00-5:00.

57. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

58. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Inm



**PATRICK ASSOUD  
SUPERVISORY PATENT EXAMINER**